Tujuna 5643 -
WF - Site Discov.
2179235

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Matt Mitguard, Site Manager
Brownfields and Site Assessment Section, SFD-6-1

THROUGH: Rose Fong, ESAT Task Order Manager (TOM) RF
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00405112 Amendment 4

DATE: May 10, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Tujunga SI
Site Account No.:	09 RP QB00
CERCLIS ID No.:	CAN000908605
Case No.:	39372
SDG No.:	MY5QT2
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals
Samples:	2 Water (see Case Summary)
Collection Date:	January 7 and 8, 2010
Reviewer:	April Martinez, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [ ] FYI [X] Action

SAMPLING ISSUES: [X] Yes [ ] No

Data Validation Report-Tier 3

Case No.: 39372
SDG No.: MY5QT2
Site: Tujunga SI
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: April Martinez, ESAT/LDC
Date: May 10, 2010

I. CASE SUMMARY

Sample Information

Samples:	MY5QT2 and MY5QT3
Concentration and Matrix:	Low Concentration Water
Analysis:	CLP Total Metals
SOW:	ILM05.4
Collection Date:	January 7 and 8, 2010
Sample Receipt Date:	January 12, 2010
Preparation Date:	January 13, 2010
Analysis Date:	January 14, 2010

Field QC

Field Blanks (FB):	None Provided
Equipment Blanks (EB):	MY5QT2 and MY5QT3
Background Samples (BG):	None Provided
Field Duplicates (D1):	None Provided

Laboratory QC

Method Blank & Associated Samples:	Preparation Blank-Water (PBW) and samples listed above
Matrix Spike:	Not Required (See Additional Comments)
Duplicate:	Not Required (See Additional Comments)
ICP Serial Dilution:	Not Required (See Additional Comments)

Analysis: CLP Total Metals

Analytes	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	January 13, 2010	January 14, 2010
Mercury	January 13, 2010	January 14, 2010

CLP PO Action

The non-detected results reported for several metals in sample MY5QT3 are rejected (R) since the pH of the aqueous sample was greater than 2 at the time of sample receipt. See Comment A in Validity and Comments section.

Sampling Issues

1. The sampler signature was not provided on traffic report and chain of custody (TR/CoC) record form.

2. The field quality control (QC) samples were not sent blind to the laboratory.

3. A temperature indicator bottle was not present in the sample cooler at the time of receipt. The laboratory used a calibrated IR temperature gun to determine the 4.8°C sample temperature.

Additional Comments

ILM05.4 specifies that samples identified as field blanks shall not be used for duplicate, matrix spike, or serial dilution quality control analysis.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	No	A,C
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	D
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	N/A	
8.	Matrix Spike Sample Analysis	N/A	
9.	ICP Serial Dilution Analysis	N/A	
10.	Field Duplicate Sample Analysis	N/A	
11.	Sample Quantitation	Yes	B
12.	Overall Assessment	Yes	

N/A = Not Applicable

III. VALIDITY AND COMMENTS

A. The following results are rejected and flagged "R" in Table 1A due to inadequate sample preservation.

- Aluminum, antimony, arsenic, barium, beryllium, cadmium, cobalt, lead, magnesium, mercury, potassium, selenium, silver, sodium, thallium, and vanadium in sample MY5QT3

This sample did not meet SOW sample preservation criterion. The samples were not adequately preserved in the field to a pH of less than 2 as shown below.

Sample Number	pH
MY5QT3	3.0

Sample results may be biased low and, where non-detected, false negatives may exist.

B. Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the MDL but below the CRQL are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

C. The following results are estimated and flagged "J-" in Table 1A due to inadequate sample preservation.

- Calcium, chromium, copper, iron, manganese, nickel, and zinc in sample MY5QT3.

This sample did not meet SOW sample preservation criterion. The samples were not adequately preserved in the field to a pH of less than 2 as shown below.

Sample Number	pH
MY5QT3	3.0

Sample results may be biased low.

D. The following results are reported as non-detected (U) in Table 1A due to low level initial calibration blank (ICB) and preparation blank (PBW) contamination.

- Calcium in all samples
- Chromium and manganese in sample MY5QT3

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, µg/L
Calcium	PBW	22.4
Chromium	PBW	0.68
Manganese	PBW	1.07

Affected sample results greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

ANALYTICAL RESULTS

Table 1A

Case No. : 39372 SDG No. : MY5QT2

Site : TUJUNGA WELLFIELD SITE DISCOVERY

Lab : CompuChem - LIBERTY ANALYTICAL CORPORATION (LIBRTY)

Reviewer : April Martinez, ESAT/LDC

Date : May 10, 2010

QUALIFIED DATA

Concentration in ug/L

Analysis Type : Low Concentration Water Samples for CLP Total Metals

Station Location :	BEB-11			BEB-12			MDL			CRQL								
Sample ID :	MY5QT2		EB	MY5QT3		EB												
Collection Date :	1/7/2010			1/8/2010														
PARAMETER	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
ALUMINUM	49.7L	J	B	200U	R	A	26.4			200								
ANTIMONY	60.0U			60.0U	R	A	4.4			60.0								
ARSENIC	10.0U			10.0U	R	A	1.7			10.0								
BARIUM	0.13L	J	B	200U	R	A	0.12			200								
BERYLLIUM	5.0U			5.0U	R	A	0.30			5.0								
CADMIUM	5.0U			5.0U	R	A	0.69			5.0								
CALCIUM	5000		D	5000	J-	CD	5.4			5000								
CHROMIUM	10.0U			10.0U	J-	CD	0.50			10.0								
COBALT	50.0U			50.0U	R	A	2.2			50.0								
COPPER	25.0U			1.4L	J-	BC	0.64			25.0								
IRON	20.6L	J	B	19.7L	J-	BC	14.2			100								
LEAD	10.0U			10.0U	R	A	1.9			10.0								
MAGNESIUM	5000U			5000U	R	A	10.5			5000								
MANGANESE	15.0U			15.0U	J-	CD	0.37			15.0								
MERCURY	0.20U			0.20U	R	A	0.068			0.20								
NICKEL	40.0U			1.6L	J-	BC	0.60			40.0								
POTASSIUM	5000U			5000U	R	A	6.7			5000								
SELENIUM	35.0U			35.0U	R	A	2.6			35.0								
SILVER	10.0U			10.0U	R	A	0.41			10.0								
SODIUM	5000U			5000U	R	A	108			5000								
THALLIUM	25.0U			25.0U	R	A	5.1			25.0								
VANADIUM	50.0U			50.0U	R	A	0.69			50.0								
ZINC	60.0U			8.4L	J-	BC	1.1			60.0								

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

MDL - Method Detection Limit

N/A - Not Applicable NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

CRQL - Contract Required Quantitation Limit

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.